New research programme on the Amazon

26 September 2011 - An ambitious research programme to explore what may happen to the Amazon over the coming decades as a result of climate change and deforestation has just begun.

Scientists from 14 European and South-American research institutes, including the Met Office and the Universities of Edinburgh and Leeds will work together in 'AMAZALERT'

'AMAZALERT' aims to test how vulnerable the forests of the Amazon may be to some form of die-back due to climate change and deforestation and if so, to forecast where in the region, when and how this may happen. It will also evaluate the impact and effectiveness of public policies and measures to prevent Amazon degradation.

The team, led by Dr. Bart Kruijt of the Dutch Wageningen University and Research Centre (WUR) and Dr. Carlos Nobre of the Brazilian National Space Research Institute (INPE) will design a system to help detect the signs of widespread forest degradation and to enable early warning if irreversible forest loss appears likely.

To reach its ambitious goals, 'AMAZALERT' will bring together and build upon previous work on regional climate. This includes sensitivities to change in the Amazon Basin of forest growth and the water cycle, of deforestation, and of the impacts of laws and the use of land by society.

'AMAZALERT' will also work toward a better understanding of:

- climate feedbacks such as the interactions between the changing land surface and the climate in the Amazon region.
- how people, agriculture and governments may respond to changes in the climate and environment.

The team will directly involve stakeholders from institutions and governments to include their perspectives in modelling and to assist in development of a blueprint for an Early Warning System.

The Met Office will be using its latest Earth System Models to assess how the climate and the forest in the Amazon Basin may change in the future. Building on a previous collaborative project with INPE, "Dangerous Climate Change in Brazil", the Met Office will be working to understand and disentangle the interactions between climate, deforestation, and important factors such as fire.

Two other leading UK research institutions will join 'AMAZALERT'. Scientists from the Universities of Edinburgh and Leeds will bring their expertise in measuring and understanding ecosystem processes, which will then be used to improve the modelling of how forests work. This is a crucial step needed to understand how future climate may interact with Amazonian forests, and how society may use the resources provided by the forests of the region.

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Notes to Editors:

- The 4.7 Million Euro 'AMAZALERT' project, jointly funded by the European 7th Framework programme and national organizations, will hold an inaugural meeting from 3-5 October, at the premises of the Centre for Earth System Science of, INPE, in São José dos Campos, São Paulo state, Brazil.
- Participating institutions include: Wageningen University and Research Centre (NL), Brazilian National Space Research Institute (BR) , Met Office (UK), Climate and Environmental Sciences Laboratory (FR), University Gent (BE), EMBRAPA, Brazilian Agricultural Research Corporation (BR), Potsdam Institute for Climate Impacts Research (DE), Vrije Universiteit (NL), Joanneum Research (AU), University Leeds (UK), University Edinburgh (UK), Friends of Nature Foundation (BO), Universidad Nacional (CO), University of Sao Paulo (BR)

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